

Appln. No. 10/071,684
Amendment dated April 1, 2004
Reply to Office Action mailed December 4, 2003

REMARKS

Reconsideration is respectfully requested.

Claims 1 through 10 and 15 through 23 remain in this application. Claims 11 through 14, which were previously withdrawn, have been cancelled. No claims are currently withdrawn. Claims 24 through 27 have been added.

The Examiner's rejections will be considered in the order of their occurrence in the Office Action.

Part 1 of the Office Action

Claims 11 through 14, which were withdrawn in the previous response, have been cancelled without prejudice as being directed to the non-elected embodiment of the invention.

Part 2 of the Office Action

Claims 1 through 10 and 15 through 23 have been rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 19 of U.S. Patent No. 6,347,761.

Submitted with this response is a "Terminal Disclaimer", which is submitted to overcome the obviousness-type double patenting rejection, and withdrawal of the rejection is respectfully requested.

Parts 3 and 4 of the Office Action

Claims 1 through 3 and 7 through 10 have been rejected under 35 U.S.C. §102(b) as being anticipated by Pierce (U.S. Patent No. 4,796,826).

Claims 1 through 10 and 15 through 20 have been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Reynolds et al (U.S. Patent No. 4,148,445) in view of Pierce (U.S. Patent No. 4,796,826).

Appln. No. 10/071,684
Amendment dated April 1, 2004
Reply to Office Action mailed December 4, 2003

Claims 1 through 6

Claim 1, particularly as amended, requires "a lifting assembly for lifting a spool of cable onto and off of the trailer and supporting the spool on the trailer between the front and back ends of the trailer" and "cable guiding means for guiding movement of cable onto and off of the spool *in a substantially horizontal orientation between the spool and the cable guiding means* when the spool is supported on the lifting means, the *cable guiding means being mounted on the trailer rearwardly of the lifting assembly* for supporting a length of the cable in a rearward direction from the spool supported on the lifting assembly" (emphasis added). These features of the invention, which are disclosed, for example, in Figures 1 and 3 of the drawings, permit a user to easily engage in the common practice of unloading a portion of the cable on the spool onto the ground behind the trailer in a stack of "figure-8" loops of cable for use of the cable, and this practice can simply be accomplished by a user standing on the ground behind the trailer.

This practice of creating a stack of "figure-8"s is especially easily accomplished with the structure required in claim 2 of "a boom structure mounted on the trailer for supporting the guide structure, the boom structure *being pivotally mounted* on the trailer such that the guide structure is movable along a path extending generally transverse to an axis of the trailer extending between the front and back ends of the trailer" (emphasis added).

In contrast, the Pierce patent shows a truck with a boom 40 that extends upwardly from the bed 32 of the truck so that cable on the guides mounted on the boom are guided upwardly from the spools and then outwardly, which is shown as being suitable for stringing lines in an elevated condition on support poles. However, the Pierce patent does not show "cable guiding means for guiding movement of cable onto and off of the spool *in a substantially level orientation between the spool and the cable*

Appln. No. 10/071,684

Amendment dated April 1, 2004

Reply to Office Action mailed December 4, 2003

guiding means" and "the cable guiding means being mounted on the trailer rearwardly of the lifting assembly for supporting a length of the cable in a rearward direction from the spool" as required by claim 1. Further, the guide structure shown in Pierce makes it very difficult, if not impossible, to create a stack of Figure-8 loops of cable, especially behind the truck, since the boom of Pierce is located at the middle of the truck, not at the rear.

In further contrast, the Reynolds patent shows a truck, and a truck and trailer assembly, in which the guidance means for the pipe is specifically designed for moving the pipe from the spool *over the front* of the truck, and not in a rearward direction, even when spools are supported on the trailer. It is submitted that the Reynolds patent could only lead one of ordinary skill in the art to an apparatus in which pipe is dispensed from a spool from the front of the truck (or trailer). In fact, the Reynolds patent discusses the retrieval of pipe as the truck is moving in a forward direction (in an operation which would be virtually impossible if the pipe was attempted to be retrieved from the back of the truck or a trailer). See, e.g., Reynolds at col. 1, lines 48 through 59:

In retrieving the pipe, an end of the pipe is attached to a storage reel mounted on a transport vehicle. The vehicle, which may be a truck or a drawn trailer, is then moved over the terrain over which the pipe has been previously laid, and the flexible pipe is drawn onto the storage reel as the vehicle is moving. With the method of the present invention, the retrieval time is significantly reduced because relatively long lengths of flexible pipe can be retrieved without severing the pipe or halting the retrieving operations until the reel is filled. The vehicle moves along the flexible pipe is drawn onto the reel until the reel is full or substantially full.

And also at col. 2, lines 3 through 13:

Also, level winding control structure is provided forwardly of the storage reel on the vehicle to permit forward movement of the vehicle during retrieval and to control winding of the flexible pipe onto the reel in orderly, closely wound spirals to minimize tangling of the pipe. Further, guiding channel structure is provided at the front of the vehicle to guide the pipe past the forward end of the vehicle to the level winding control structure, to assist in level winding of the pipe

Appn. No. 10/071,684

Amendment dated April 1, 2004

Reply to Office Action mailed December 4, 2003

onto the storage reel and to prevent the pipe from interfering with the moving vehicle.

It is therefore submitted that, since any to rear mount the level wind control structure (C) and guide channel (G) of the Reynolds apparatus would defeat the primary purpose of the Reynolds patent of being able to retrieve pipe continuously while the truck is moving, and thus the Reynolds patent would not lead one of ordinary skill in the art to any rear mounting of the any guidance assembly..

It is therefore submitted that the allegedly obvious combination of the Pierce and Reynolds patents would not lead one of ordinary skill in the art to the invention required by claim 1.

Claims 7 through 10

Claim 7 requires, in part, "control means for controlling the supply of power from the power supply to the lifting assembly, the control means including a housing for mounting at least one control thereon, the housing is movably mounted on the trailer for permitting movement of the housing between a storage position and an operational position". As set forth in the application, the positionability of the control means as set forth in claim 7, and as further detailed in claims 8 through 10, facilitates convenient locating of the controls with respect to the user when the controls are being used and the invention is being operated, while moving the controls out of the way to a more secure position during storage and transport.

The Office Action is silent as to what element of the Pierce apparatus, if any, is believed to anticipate the control means defined in applicant's claim 7. It is submitted that the Pierce and Reynolds patents generally lacks any discussion of the mounting or location of controls, and particularly do not show any controls that are mounted on a housing that is movably mounted for movement between a storage position and an operational position. Therefore, it is submitted that these patents could not

Appln. No. 10/071,684

Amendment dated April 1, 2004

Reply to Office Action mailed December 4, 2003

lead one of ordinary skill in the art to the requirements of claim 7, especially those requirements dealing with the movement of a housing that has the controls mounted thereon. It is therefore submitted that the recitation of claim 7 is patentable over the Pierce and Reynolds patents.

Claims 8 through 10, which depend from claim 7 and thus recite a combination including this requirement, are also submitted to allowable over the cited patents.

Claims 15 through 17

Claim 15 requires, in part, "a level winding assembly for guiding cable winding onto a spool when the spool is mounted on the lifting assembly, the level winding assembly including *a swing structure located on the trailer rearwardly of the lifting assembly, the swing structure being pivotally mounted on the trailer for pivot movement about a substantially horizontal axis to produce lateral movement of the swing structure in a substantially vertical plane transverse to the trailer*" (emphasis added). This feature of the applicant's invention, described in the specification at pages 22 through 23, and is shown in Figure 20 of the drawings, facilitates the movement of cable onto a spool supported on the lifting assembly of the invention, so that the cable may be wrapped about the spool in a relatively level manner without bunching the cable at one end of the spool or other.

It is noted that both the Pierce boom 40 and the Reynolds inner support arm 90-extension arm 94 pivot about a vertical axis and thus cannot produce "pivot movement about a substantially horizontal axis to produce lateral movement of the swing structure in a substantially vertical plane transverse to the trailer" as required in claim 15, and therefore claim 15, as well as claims 16 and 17 which depend from claim 15, are submitted to be allowable over the prior art.

Appln. No. 10/071,684

Amendment dated April 1, 2004

Reply to Office Action mailed December 4, 2003

Further, claim 16 requires "a base structure for removably mounting on the trailer, the swing structure being pivotally mounted on the base structure" and "a swing actuator structure for pivoting the swing structure with respect to the base structure", neither of which is shown in the patents relied upon in the Office Action. Still further, claim 17 requires "a head portion mounted on an upper end of the arm, the head portion having a plurality of rollers formed into a U-shaped configuration with an open top". Neither of the patents relied upon in the rejections shows "a plurality of rollers formed into a U-shaped configuration", and therefore it is submitted that claim 17 also defines over the prior art.

Claims 18 through 20

Claim 18 requires, in part, "each of the support arms being pivotally mounted on the trailer such that the support arms are pivotable between a transport position and a retrieve position" and "the transport position being characterized by the elongate pole being positioned above the deck of the trailer, the retrieve position being characterized by the elongate pole being positioned behind the back end of the trailer". The retrieve position permits spools to be lifted from a position behind the trailer (such as, for example, on the ground), and the movement into the transport position positions the spool above the deck in a location that is highly suitable for transporting the spool on the trailer.

It is alleged in the Office Action that the Pierce patent shows the claimed retrieve and transport positions of the applicant's invention, but it is noted that the Pierce patent shows a rod supporting a spool that is always positioned behind the bed 32 of the truck. Note that in Figure 3 of the Pierce patent, in which the rear arms 50 are in their forward-most position, the rod is located behind the deck 32 and not above the deck 32. This is also evident from Figures 9 through 11 of Pierce, which illustrate the path of movement of the rear arms. It is therefore submitted that the Pierce

Appln. No. 10/071,684

Amendment dated April 1, 2004

Reply to Office Action mailed December 4, 2003

patent thus could not lead one of ordinary skill in the art to the claim 18 requirement of a transport position in which "the elongate pole [is] positioned above the deck of the trailer" and a retrieve position in which "the elongate pole [is] positioned behind the back end of the trailer", since in the Pierce patent, the rod on arm 50 is always behind the bed 32 of the truck. In contrast, the Reynolds patent shows the shaft 12 always being positioned above the bed 20 of its truck.

It is therefore submitted that the allegedly obvious combination of the Pierce patent and the Reynolds patent could not lead one of ordinary skill in the art to the requirements of claim 18.

Withdrawal of the §102(b) rejection of claims 1 through 3 and 7 through 10, and of the §103(a) rejection of claims 1 through 10 and 15 through 20, is therefore respectfully requested.

Part 5 of the Office Action

Claims 21 through 23 have been allowed

Added claims

Added claim 24 requires "means located on the front end of the trailer for hitching the trailer to a vehicle so that the trailer is towable by the vehicle", which permits the trailer to be towed from the opposite end of the trailer from which the cable is dispensed from the spool using the cable guiding means.

Added claim 25 requires that "the cable guiding means is pivotally mounted on the trailer to pivot about a substantially vertical axis and permit lateral movement of the length of cable in a substantially horizontal plane". This feature, in combination with the combination of features of claim 1, further facilitates the figure-8 stacking described above.

Appn. No. 10/071,684
Amendment dated April 1, 2004
Reply to Office Action mailed December 4, 2003

Added claim 26 requires that "the trailer has wheels and an axis extending between the wheels of the trailer, wherein the elongate pole is supported substantially above the axis an axle of the trailer when the lifting assembly is in the transport position". This feature of the invention, shown in Figures 1 and 3, balances the load of the spool on the trailer when a spool is being transported on the trailer.

Added claim 27 requires that "the lifting assembly is cantilevered forwardly over the deck in the transport position and is cantilevered backwardly from the back end of the trailer in the retrieve position". These features are shown, for example, in Figures 1 and 19 of the drawings, and permit the single pair of arms of the lifting assembly to reach and pick up a spool off of the ground and then position the spool above the deck of the trailer.

CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited.

Respectfully submitted,


Jeffrey A. Proehl (Reg. No. 35,987)
LEONARD & PROEHL, Prof.L.L.C.
Customer No. 40, 158
3500 South First Avenue Circle, Suite 250
Sioux Falls, SD 57105-5807
(605)339-2028 FAX (605)336-1931

Date: APRIL 2, 2004